

REMARKS

Claims 1-8 and 21-32 are pending.

Claim 1 has been amended to recite that the hot melt adhesive is a thermoplastic hot melt adhesive. This would be apparent to one skilled in the art from a reading of the disclosure as a whole including the examples. Also attached is copy of the ordinary meaning of the word "thermoplastic", as set forth in The American Heritage® College Dictionary, Third Edition, 2000 (page 1407).

New claims 30-32 have been added. Support may be found in the claims as previously presented.

No new matter has been added by way of the foregoing amendment. Entry is requested.

Claims 1, 3 and 21 are rejected under 35 U.S.C 103 (a) as being unpatentable over Yang et al. (U.S. Patent No. 6,207,248).

Yang discloses reactive hot melt polyurethane adhesives. Reactive hot melts are one-component, 100% solids, solvent-free urethane prepolymers. Unlike conventional hot melts that can be repeatedly heated from its solid state and flowed to a liquid form, reactive hot melts contain isocyanate terminated prepolymers that react with surface or ambient moisture in order to chain-extend forming a new polyurethane polymer. Reactive hot melt adhesives go through an irreversible chemical reaction once dispensed in the presence of ambient moisture. While the reactive hot melts of Yang may contain additives such as tackifying resins and thermoplastic polymers, the additives are still reactive polyurethane hot melt adhesives and thus contain a polyfunctional isocyanate component and a polymer polyol component. Claim 1 has been

amended to recite that the hot melt adhesive is a thermoplastic hot melt adhesive. One skilled in the art knows that a thermoplastic hot melt adhesive can be repeatedly heated from its solid state and flowed to a liquid form. With respect to claim 21 and new claims 30-32, the claim language would exclude the use of the components required by Yang. Yang does not disclose or suggest a hot melt adhesive that is not a reactive polyurethane hot melt. Applicants' claimed invention does not encompass reactive hot melts and do not contain polyurethane components.

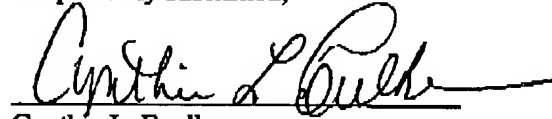
Reconsideration and withdrawal of the rejection over Yang is requested.

Claims 2 and 22 are rejected under 35 U.S.C 103 (a) as being unpatentable over Yang et al. (U.S. Patent No. 6,207,248) in view of Milks (U.S. Patent No. 5,401,791). Claims 4, 5, 23 and 24 are rejected under 35 U.S.C 103 (a) as being unpatentable over Yang et al. (U.S. Patent No. 6,207,248) in view of Dupont et al. (U.S. Patent No. 5,325,781).

The disclosures of Milks and Dupont fail to cure the defect of Yang by suggesting a hot melt adhesive, which is not a reactive hot melt, comprising an ethylene n-butyl acrylate copolymer, a modified terpene tackifier for use in bonding difficult to bond substrates such as UV varnish treated substrates, acrylic varnish treated substrates and fluorochemical treated substrates. Reconsideration and withdraw of the rejections over Yang in view of Milks and Yang in view of Dupont is requested.

Favorable reconsideration and an early notification of allowance are solicited.

Respectfully submitted,



Cynthia L. Foulke
Reg. No. 32,364

July 30, 2004

National Starch and Chemical Company
P. O. Box 6500
Telephone No.: 908-685-7483
Bridgewater, New Jersey 08807-0500

THE AMERICAN HERITAGE[®] COLLEGE DICTIONARY

THIRD EDITION


HOUGHTON MIFFLIN COMPANY
Boston • New York

THE AMERICAN HERITAGE® COLLEGE DICTIONARY

is the
Herita
famous
sign, a
and u
forma
langua

C
Defin
ward,
meani
lookin
the m
are lis
most

Biodi
mash
mail
in T
Dicti
vocab
with
datab

EXP
How
able to
ble di
defini
guida
Herita
Editio
curren
ion po
ican f
many
schola
noted
the E

Words are included in this Dictionary on the basis of their usage. Words that are known to have current trademark registrations are shown with an initial capital and are also identified as trademarks. No investigation has been made of common-law trademark rights in any word, because such investigation is impracticable. The inclusion of any word in this Dictionary is not, however, an expression of the Publisher's opinion as to whether or not it is subject to proprietary rights. Indeed, no definition in this Dictionary is to be regarded as affecting the validity of any trademark.

American Heritage® and the eagle logo are registered trademarks of Forbes Inc. Their use is pursuant to a license agreement with Forbes Inc.

Copyright © 2000, 1997, 1993 by Houghton Mifflin Company. All rights reserved.

No part of this work may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, or by any information storage or retrieval system without the prior written permission of Houghton Mifflin Company unless such copying is expressly permitted by federal copyright law. Address inquiries to Reference Permissions, Houghton Mifflin Company, 222 Berkeley Street, Boston MA 02116.

Library of Congress Cataloging-in-Publication Data

The American heritage college dictionary. — 3rd ed.

p. cm.
ISBN 0-395-66917-0 (plain edge). — ISBN 0-395-67161-2 (thumb edge). — ISBN 0-395-66918-9 (deluxe binding).

1. English language—Dictionaries. 2. Americanisms.

PE1628.A6227 1993

423—dc20

92-42124
CIP

Manufactured in the United States of America

For information about this and other Houghton Mifflin trade and reference books and multimedia products, visit The Bookstore at Houghton Mifflin on the World Wide Web at <http://www.hmco.com/trade/>.

flow of heat. — *ther·mo·a·lec·trical·ly adv.*
ther·mo·a·lec·trical·ly (thúr·mò·à·lèk·t·rí·k·l·t·é, -è'lèk·l·t·é) *n.* Electricity generated by a flow of heat, as in a thermocouple.
ther·mo·a·lec·tron (thúr·mò·à·lèk·trón') *n.* An electron emitted by a material at high temperatures.
ther·mo·gram (thúr·mò·grám') *n.* A record made by a thermograph.
ther·mo·graph (thúr·mò·gráf') *n.* 1. A thermometer that records the temperature it indicates. 2. The apparatus used in diagnostic thermography.
ther·mog·ra·phy (thar·mò·gr·ə·fē) *n., pl. -phies.* 1. A process for producing raised lettering, as on stationery, by application of a powder fused by heat to the fresh ink. 2. A diagnostic technique in which an infrared camera produces images that reveal sites of abnormal tissue growth by measuring temperature variations on the surface of the body. — *ther·mo·graph·ic* (mò·gráf'ík) *adj.* — *ther·mo·graph·ical·ly adv.*
ther·mo·junc·tion (thúr·mò·júng·shon) *n.* The point of contact between two dissimilar metals in a thermocouple.
ther·mo·la·bile (thúr·mò·là·b'il, -b'il') *adj.* Subject to destruction, decomposition, or great change by heating. Used esp. of biochemical substances.
ther·mo·lu·mi·nes·cence (thúr·mò·lòd·mò·nès·əns) *n.* A phenomenon in which certain minerals release previously absorbed radiation upon being moderately heated.
ther·mol·y·sis (thar·mò'l·sìs) *n., pl. -ses (-sèz').* 1. *Physiol.* Dissipation of heat from the body, as by evaporation. 2. *Chem.* Dissociation or decomposition of compounds by heat. — *ther·mo·lytic* (thúr·mò·l·t'ík) *adj.*
ther·mom·e·ter (thar·mòb'·tər) *n.* An instrument for measuring temperature, esp. one having a graduated glass tube with a bulb containing a liquid, such as mercury, that expands and rises in the tube as the temperature increases.
ther·mom·e·try (thar·mòb'·trē) *n.* 1. Measurement of temperature. 2. The technology of temperature measurement. — *ther·mo·met·ric* (thúr·mò·mè·tr'ík) *adj.*
ther·mo·nu·cle·ar (thúr·mò·nù·klē·ər, -nyù·l·ə) *adj.* 1. Of, relating to, or derived from the fusion of atomic nuclei at high temperatures: *thermonuclear reactions.* 2. Of, relating to, or characterized by the use of atomic weapons based on fusion, esp. as distinguished from those based on fission.
ther·mo·pe·ri·od·ism (thúr·mò·pī·ə·diz·əm) also *ther·mo·pe·ri·o·dic·ity* (tī·dis'·tē) *n.* The effect on an organism of the rhythmic fluctuation of temperature, as that accompanying the alternation of day and night.
ther·mo·phil·ic (thúr·mò·fī·l'ík) *adj.* Requiring high temperatures for normal development, as certain bacteria. — *ther·mo·phil·ic* (-fīl') *n.*
ther·mo·pile (thúr·mò·pīl') *n.* A device consisting of a number of connected thermocouples, used for measuring temperature or generating current. [THERMO + PILE']
ther·mo·plas·tic (thúr·mò·plàs·t'ík) *adj.* Becoming soft when heated and hard when cooled. — *n.* A thermoplastic resin. — *ther·mo·plas·tic·ity* (tī·plàs·t'ē·tē) *n.*
Ther·mop·y·lae (thar·mò·p·lē) *n.* A narrow pass of Euboea, Greece; site of an unsuccessful Spartan stand against the Persians in 480 B.C.
ther·mo·re·cep·tor (thúr·mò·rē·sèp·tər) *n. Biol.* A sensor or receptor that responds to heat and cold.
ther·mo·reg·u·late (thúr·mò·règ·yò·làt') *intr.v.* -lat·ed, -lat·ing, -lates. 1. To regulate body temperature. 2. To undergo thermoregulation.
ther·mo·reg·u·la·tion (thúr·mò·règ·yò·là·shon) *n.* Maintenance of a constant internal body temperature independent from the environmental temperature. — *ther·mo·reg·u·la·to·ry* (-règ·yò·là·tò·rē, -vò·rē·ə) *adj.*
Ther·mos (thúr·məs) *n.* A trademark used for a brand of vacuum bottles and other insulated containers.
ther·mo·set·ting (thúr·mò·sèt·ing) *adj.* Permanently solidifying on being heated. Used of certain synthetic resins.
ther·mo·sphere (thúr·mə·sfī·ə) *n.* The outermost shell of the atmosphere, between the mesosphere and outer space, where temperatures increase steadily with altitude. — *ther·mo·spher·ic* (-sfī·k, -sfēr'ík) *adj.*
ther·mo·sta·ble (thúr·mò·stə·b'l) also *ther·mo·sta·bil·ity* (-b'il·tē) *adj.* Unaffected by relatively high temperatures, as certain ferments. — *ther·mo·sta·bil·ity* (-stə·b'il·tē) *n.*
ther·mo·stat (thúr·mə·stāt') *n.* A device, as in a home heating system, that automatically responds to temperature changes and activates switches controlling the equipment. — *ther·mo·stat·ic* *adj.* — *ther·mo·stat·ical·ly adv.*
ther·mo·tax·is (thúr·mò·tāk·sìs) *n., pl. -tax·es (-tāk·sèz').* 1. Movement of a living organism in response to temperature changes. 2. Normal regulation or adjustment of body temperature. — *ther·mo·tac·tic* (-tāk'·t'ík), *ther·mo·tax·ic* (-tāk'·t'ík) *adj.*
ther·mot·ro·pism (thar·mòt·rò·piz·əm) *n. Biol.* The tendency of plants or other organisms to bend toward or away from heat. — *ther·mo·trop·ic* (thúr·mò·tròp'·t'ík) *adj.*
thermy *suffix:* Heat: *diathermy*. [NLAS. *thermia* < Gk. *thermē* = heat < *thermos*, warm, hot. See *g·ther·*.]
the·ro·pod (thī·pòd') *n.* Any of various carnivorous di-

ā pat	oi boy
ā pay	ou our
ār care	ōō took
ā father	ōō boot
ē pet	ū cut
ē be	ūr urge
ī pit	ū thin
ī pie	ch this
īr pier	hw which
ō pot	zh vision
ō toe	a about.
ō now	item

Stress marks:
' (primary);
' (secondary), as in
dictionary (dík'gha-ně'rě)